

DERWENT-ACC-NO: 1991-268501  
DERWENT-WEEK: 199137  
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TITLE: Use of ester lubricating oils - in  
compressors for chlorine-free  
partially fluorinated hydrocarbon refrigerants

INVENTOR: CORNILS, B; HENRICI, R ; LAPPE, P ;  
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; WEBER, J

PATENT-ASSIGNEE: HOECHST AG[FARH]

PRIORITY-DATA: 1990DE-4006828 (March 5, 1990)

PATENT-FAMILY:

PUB-NO	PUB-DATE	
LANGUAGE	PAGES	MAIN-IPC
EP 445610 A	September 11, 1991	N/A
000	N/A	
DE 4006828 A	September 12, 1991	N/A
000	N/A	
DE 59101529 G	June 9, 1994	N/A
000	C10M 105/00	
EP 445610 B1	May 4, 1994	G
006	C10M 105/00	
ES 2056507 T3	October 1, 1994	N/A
000	C10M 105/00	
JP 04220497 A	August 11, 1992	N/A
008	C10M 105/44	

DESIGNATED-STATES: AT BE DE ES FR GB IT NL SE AT BE  
DE ES FR GB IT NL SE

CITED-DOCUMENTS: EP 218207; EP 406479 ; GB 1460665  
; GB 2216541 ; JP59164393

; JP61171799 ; US 4155861 ; US 4851144 ; WO 9012849  
; 02Jnl.Ref ; US 4166861

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
	APPL-DATE	
EP 445610A	N/A	
1991EP-0102680	February 23, 1991	
DE 4006828A	N/A	
1990DE-4006828	March 5, 1990	
DE59101529G	N/A	
1991DE-0501529	February 23, 1991	
DE59101529G	N/A	
1991EP-0102680	February 23, 1991	
DE59101529G	Based on	EP
445610	N/A	
EP 445610B1	N/A	
1991EP-0102680	February 23, 1991	
ES 2056507T3	N/A	
1991EP-0102680	February 23, 1991	
ES 2056507T3	Based on	EP
445610	N/A	
JP04220497A	N/A	
1991JP-0034478	February 28, 1991	

INT-CL (IPC): C09K005/04; C10M105/42 ;  
C10M105/44 ; C10N040/30 ;  
C10N040:30 ; C10M105/00 ; C10M105:42 ;  
C10M105:52

ABSTRACTED-PUB-NO: EP 445610A

BASIC-ABSTRACT: Certain esters (I) are used as lubricants for refrigerant compressors operating with Cl-free partially fluorinated hydrocarbon refrigerants.

(I) are esters derived from 'dicarboxylic acids and glycols or polyglycols and monocarboxylic acids or monoalcohols' (sic).

ADVANTAGE - (I) exhibit good miscibility with the refrigerants at temps. as low as -40 deg.C., have viscosities of 10-100 mm<sup>2</sup>/sec. at 40 deg.C., have good thermal stability in the absence of air and moisture, and are non-hygroscopic.

ABSTRACTED-PUB-NO: EP 445610B

EQUIVALENT-ABSTRACTS: The use of esters prepared from a dicarboxylic acid through partial esterification with a sub-stoichiometric amount of a glycol or polyglycol as well as through completion of the esterification of the acid with the necessary amount of a monoalcohol or prepared from a glycol or polyglycol through partial esterification with a sub-stoichiometric amount of a dicarboxylic acid as well as through completion of the esterification of the glycol or polyglycol with the necessary amount of a monocarboxylic acid as lubricants for refrigeration compressors utilising chlorine-free, partially fluorinated hydrocarbons as refrigerant s.

CHOSEN-DRAWING: Dwg.0/0 Dwg.0/0

TITLE-TERMS:

ESTER LUBRICATE OIL COMPRESSOR CHLORINE FREE  
FLUORINATED HYDROCARBON  
REFRIGERATE

DERWENT-CLASS: A97 E17 H07 J07

CPI-CODES: A05-E01D; A12-W02; E10-E04K; E10-G02G;  
E10-G02H; H07-A; J07-A04;

CHEMICAL-CODES:

Chemical Indexing M3 \*01\*  
Fragmentation Code

H581 H582 H583 H584 H589 J0 J014 J2 J273  
M210  
M211 M212 M213 M214 M215 M216 M220 M221 M222  
M223  
M224 M225 M226 M231 M232 M233 M262 M272 M281  
M282  
M312 M313 M314 M315 M316 M321 M322 M323 M331  
M332  
M333 M342 M382 M383 M391 M392 M393 M416 M620  
M781  
M903 M904 Q416 Q433 R023  
Markush Compounds  
199137-A7201-P 199137-A7202-P 199137-A7203-P  
199137-A7204-P

UNLINKED-DERWENT-REGISTRY-NUMBERS: 0930S; 1060S

POLYMER-MULTIPUNCH-CODES-AND-KEY-SERIALS:

Key Serials: 0004 0013 0037 0231 1279 1291 1319  
1321 1323 1325 1327 3075 1329  
1450 1452 1454 1594 1608 1999 2014 2177 2197 2198  
2511 2564 2585 2707 2758  
Multipunch Codes: 014 028 038 04- 075 143 144 147  
155 157 160 161 162 169 170  
171 172 173 198 200 207 208 231 239 31- 336 359 475  
512 53& 575 583 589 638 644  
720

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1991-116363